



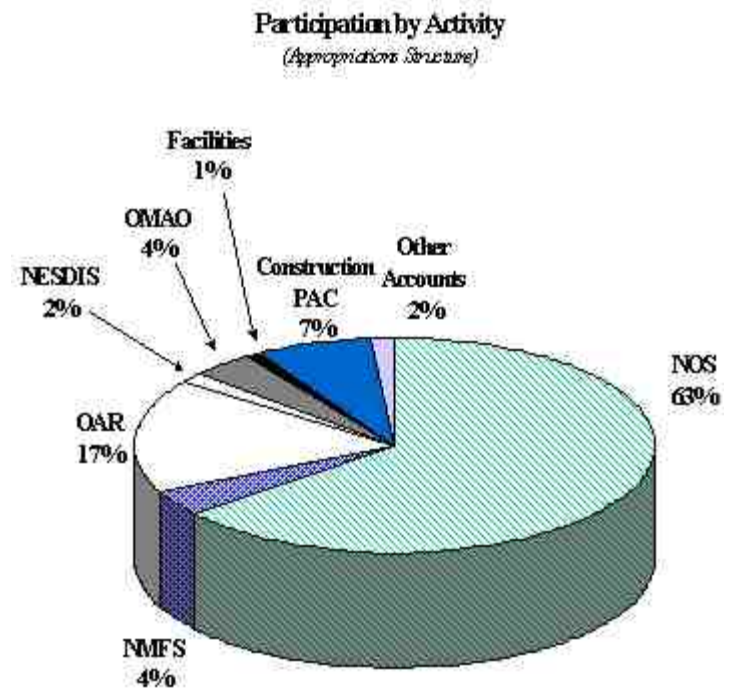
Fagatele Bay National Marine Sanctuary

## Sustain Healthy Coasts

**Total Request: \$390,046,000**

**Vision** - By 2005, the Nation's coasts will have more productive and diverse habitats for fish and wildlife, and cleaner coastal waters for recreation and the production of seafood. Coastal communities will have thriving, sustainable economies based on well-planned development and healthy coastal ecosystems.

**Challenge** - Despite progress in developing technology, information and management tools to protect and sustainably use coastal resources, rapid population growth and increasing demands continue to degrade coastal resources and threaten the economic productivity and environmental services of coastal areas. Although these areas comprise only 10 % of U.S. land area, over half of the U.S. population lives on or near the coast, and coastal populations are growing faster than most inland areas. There are many signs that additional efforts are needed to protect the economic and environmental values of U.S. oceans and coasts. In 1998, for example, about one third of 1,062 beaches reporting had at least one advisory or closing, up from 26% in 1997. Polluted runoff and degraded water quality continues to close or restrict the use of nearly 31 % of U.S. shellfish growing waters, and declines in environmental quality continue to threaten coastal communities, businesses, and human health.



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Healthy coastal environments support tourism, recreation, fishing and other industries that generate more than \$100 billion annually in coastal communities across the Nation. Coastal wetlands, estuaries, coral reefs and other areas provide essential feeding and nursery habitats for approximately 70 percent of all U.S. commercial and recreational fisheries species. Maintaining the health, productivity and biodiversity of coastal ecosystems is challenging, but essential to sustainable development of coastal economies and the future welfare of the Nation.

**Implementation Strategy** - The goal of Sustain Healthy Coasts encompasses the following objectives:

- Protect, conserve and restore coastal habitats and their biodiversity.
- Promote clean coastal waters to sustain living marine resources and ensure safe recreation, healthy seafood, and economic vitality.
- Foster well-planned and revitalized coastal communities that sustain coastal economies, are compatible with the natural environment, minimize the risks from nature's hazards, and provide access to coastal resources for the public's use and enjoyment.

**Benefits** - The pursuit of this goal provides information, technology, solutions, and other valuable tools to coastal resource managers at local, state, tribal and Federal levels. NOAA's coastal activities form an integrated suite of monitoring, research, assessment, restoration, information dissemination and resource management programs that enable sound decision making and sustainable development of coastal areas. Federal-state partnerships such as the Coastal Zone Management Program, National Estuarine Research Reserve System, and National Sea Grant College Program are essential components of the Sustain Healthy Coasts goal. Research provides improved understanding of the way in which coastal ecosystems function, increasing our ability to predict how they respond to changes. The ability to predict change and determine its causes empowers managers and stakeholders to work together to promote sustainable use of coastal resources and mitigate costly damages. NOAA's coastal programs effectively ensure that the Nation's coastal ecosystems are managed for the long-term benefit of the public.

## **FY 2000 Accomplishments**

Maintaining the health, productivity and biodiversity of coastal ecosystems is essential to sustainable coastal economies. It is also critical to the future welfare of the Nation. Through the Sustain Healthy Coasts goal, NOAA addresses the practical needs and concerns of coastal resource managers, provides the science and technology for improving coastal resource management, and helps communities and other partners implement sound and effective ocean and coastal stewardship. These accomplishments are primarily realized through the efforts of the National Ocean Service, the National Marine Fisheries Service, the National Environmental Satellite, Data and Information Service, and the Office of Oceanic and Atmospheric Research. Accomplishments in FY 2000 include:

- NOAA responded to calls for scientific assistance on more than 122 incidents and spills of toxic materials into the Nation's coastal waters. NOAA's Hazardous Materials and Disaster Response teams provided on-site scientific support to other Federal and state agencies, and NOAA's Damage Assessment and Restoration Program evaluated and screened spills to determine whether to initiate damage assessment activities.

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- NOAA and other natural resource trustees removed vessel structures of nine fishing vessels that grounded on the coral reefs of Pago Pago Harbor, American Samoa in 1991. The restoration completely removed the vessels and associated debris to allow natural recovery of about 30,000 square feet of submerged bottom that has been under the grounded vessels.
  - In FY 2000, NOAA resolved 6 cases to recover funds for restoration of coastal resources injured by releases of oil or other hazardous materials. This included a significant settlement for the 1996 *North Cape* oil spill off the coast of Rhode Island, wherein 1.24 million lobsters will be restocked and \$8 million will be provided to restore other natural resources, as well as \$1.2 million for the September 1996 spill of approximately 200,000 gallons of oil into the Fore River when the M/T *Julie N* collided with a bridge near Portland, Maine.
  - NOAA has given full approval to three state Coastal Nonpoint Pollution Control Program: Maryland, Rhode Island and California. This accomplishment supports NOAA's implementation of the Clean Water Action Plan.
  - NOAA supported dozens of projects and partnerships to restore damaged coastal habitats. For example, the Delta Wide Crevasse project constructed 17 new artificial crevasses to foster and create 2,400 acres of natural wetlands along the Mississippi River. In Louisiana, the Lake Chapeau restoration project created 160 acres of wetlands by placing sediments dredged from Atchafalaya Bay into the fragmented marshes. NOAA also commenced construction of three habitat restoration projects in Commencement Bay, WA to benefit commercial and recreational fish species found in Puget Sound.
  - NOAA established the Coastal Data Development Center at Bay St. Louis, Mississippi. The NCDDC will be a National Center that provides for archive of, and access to, the long-term coastal data record. NCDDC will work closely with many of the Federal/state/local agencies, academic institutions, and the private sector to create a unified, long-term archive for coastal data sets.

The health of our Nation's coasts depends on protecting and restoring marine habitats, improving coastal water quality, and building sustainable coastal communities. NOAA provides the science, information, technology, management and training to make progress on these objectives. The SHC performance measures and accomplishments help illustrate NOAA's progress, but they also show the work that still needs to be done. For more information about NOAA's performance in sustaining healthy coasts, please see the Appendix.

### **Key FY 2002 Activities**

While significant progress has been made, water pollution continues to be the number one threat to healthy coastal ecosystems. Reducing runoff pollution and addressing new classes of contaminants that may degrade living marine resources and threaten human health are major concerns that will extend into the new century.

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Because harmful algal blooms are increasing in frequency and duration and have been linked to approximately \$1 billion in losses in the past two decades, predicting and reducing hypoxia and harmful algal blooms will be another priority in the 21<sup>st</sup> century. In addition, preventing and controlling introductions of invasive alien species will be essential to protect the fisheries and other native species that support coastal communities and economies.

Additional priorities will include reducing the effects of natural hazards; conserving and sustaining coral reefs, and exploring the ocean frontier. The new century will bring us face-to-face with growing concerns about food, security, energy, and environmental and economic health. Solutions to many of these concerns may be found in the ocean—and most of it has yet to be explored.

In FY 2002, funding will be invested in increasing the productivity and diversity of fish and wildlife habitats, providing clean coastal waters, initiating a program to reduce the impacts of coastal storms, and expanding our exploration of the ocean world.

### **Enhance NMS Support, Research and Exploration**

New funding for the National Marine Sanctuary System (NMSS) will improve and enhance the operating and technical capacity in the thirteen national marine sanctuaries, improving protection of important sanctuary resources, including coral reefs, endangered marine mammals, sensitive habitats, and significant cultural resources.

Implementation of management changes identified through the revisions of sanctuary specific management plans will begin. These management changes are expected to be in a wide range of activities ranging from drafting and implementing new regulations, establishing new partnerships, additional outreach and education efforts, resources inventories, and additional research, monitoring and restoration.

Enhancement of the Thunder Bay sanctuary will be a major effort in FY 2002. Sustainable Seas Expeditions (SSE) explore and conduct research in deep water habitats in NOAA's National Marine Sanctuaries. Funds will be used to purchase charter ship time and NOAA in-house vessel days-at-sea in support of basic Sanctuary research and monitoring efforts, as well as the Sustainable Seas Expeditions vessel requirements.

### **Restoration**

New funding will strengthen the capabilities of NOAA and its partners to protect and restore coastal resources under the Oil Pollution Act and CERCLA (Superfund), and improve NOAA's prevention and response capabilities. Investments will increase our understanding of the effects of spill response measures, facilitating the development of improved methods and approaches for faster recovery of the injured resources

NOAA will also expand efforts to protect coastal resources from damage caused by releases of oil and other hazardous materials. Enhanced efforts will be undertaken at Superfund sites, industrial facilities, Federal facilities, brownfields, and state-lead sites, resulting in greater protection and restoration of coastal habitats and species.

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## **Estuary Act Monitoring**

The Estuary Restoration Act of 2000, passed in November 2000, establishing a new direction for coastal habitat restoration projects in the U.S. and its territories. New funding will support agency activities mandated by the legislation, including the development of scientifically sound monitoring protocols and standards for coastal habitat restoration projects throughout the United States and its protectorates. NOAA will develop restoration databases that provide quick and easy access to information on all projects funded under the Estuary Restoration Act of 2000, as well as other projects that meet specified standards for monitoring and data collection.

## **SHC Habitat**

New funding will enable continued assistance to coastal states in the development, implementation and improvement of state and territorial coastal management programs and National Estuarine Research Reserves. The increase will allow NOAA to address the increasing requests of 33 states for support and technical assistance. It will also maintain support for and synthesize information generated by the 25 existing and 2 proposed National Estuarine Research Reserves.

New funding will enhance the monitoring and training programs at designated National Estuarine Reserve Reserves, and ultimately lead to healthier estuaries, coastal water quality, and fisheries. NOAA and state reserve staff will continue to enhance and build the System-Wide Monitoring Program (SWMP). These funding increases will enable the NERRS to expand its water quality monitoring within certain estuaries to gain a more complete understanding of spatial variation in estuarine conditions. The NERRS coastal training programs will focus on water quality, habitat, invasive species, and sustainable ecosystem issues.

Adaptive Habitat Characterization (improved methods): NOAA will lead development and implementation of advanced capabilities and specialized services to meet NOAA mission requirements for improved mapping and spatial analysis products that characterize the structure and function of coastal habitats.

## **Coastal Storms**

NOAA will initiate efforts to integrate its capabilities to predict and reduce the watershed impacts of coastal storms. New funding will allow NOAA to survey the first Coastal Storms Initiative pilot region in Florida and acquire up-to-date shallow water bathymetry for use in topographic-bathymetric projects. Funding will also support estuarine, coastal and lake modeling and forecasting. These funds will allow for the development of a hydrodynamic model for the St. John's River, Florida. This component complements Coastal Storms increases requested under the Promote Safe Navigation goal.

## **Coral Reef Monitoring**

To support coral reef monitoring, NOAA will continue to build on existing programs that identify potentially harmful naturally occurring events, such as bleaching. Improved remote sensing products and data from in-situ monitoring devices will be more accessible through improved computing power and Internet capabilities to users worldwide. International, inter-agency and cross LO collaborations will continue to develop to more effectively monitor coral reefs in crisis.

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## **Ocean Exploration**

As part of the Ocean Exploration initiative, frontier expeditions are planned for the Northeastern Pacific, the Arctic, the Gulf of Mexico and the Hudson Canyon. Proposed actions include: finding new resources in the U.S. EEZ and continental margins, exploring natural sounds through ocean acoustics, exploring America's maritime heritage and technologies to support exploration.

## **Invasive Species**

In support of the National Invasive Species Act, NOAA will continue to address aquatic nuisance species issues in marine and coastal areas. Solutions will be sought to eradicate invasive species from commercial carriers that transport these exotics either in their ballast water or in the infested sediment remaining in their empty ballast tanks.

## **Creating Value from the Sea**

As part of the National Sea Grant College Program Act, NOAA will carry out its mandate to increase the development, utilization and conservation of the Nation's ocean, coastal and Great Lakes resources. Under this mandate NOAA will create value from the sea by advancing our understanding of marine organisms in order to identify and develop products and study processes which have the potential to improve human health as well as address some marine environmental issues.

### Key Performance Measures

	1997 act.	1998 act.	1999 act.	2000 act.	2001 est.	2002 est.
Protection/Restoration of coastal habitats (cum):						
# Acres benefitted			81,000	115,000	119,000	122,000
# Damage cases settled	26	30	37	41	45	
# Interagency restoration projects	16	20	25	30	55	
# Coastal regions with adequate measures to prevent and control aquatic invasive species (Total 6 U.S. regions)				1	2	2
Completion of Coastal protection systems						
% State Coastal Nonpoint Pollution Programs	74	83	83	86	89	89
conditionally approved (% of 35 states)	0	0	0.3	0.6	2.2	2.2
% Coastal watersheds with coastal zone management measures to reduce polluted runoff (% of 1920 total watersheds)	89	91	94	94	97	97
% State Coastal Zone Management Programs	10	10	20	31	45	69
completed (% of 35 States)						
% National Estuarine Research Reserves with upgraded capabilities	8	17	25	33	50	69
% National Marine Sanctuaries at baseline operational level						
% of 40 Key U.S. Coastal Ecosystems with:						
Reduced risks from hazardous chemicals	15	20	32	37	42	52
Assessments of water quality and natural resources	23	25	28	30	33	33
Assessment of levels and effects of toxic contaminations	20	25	28	30	32	32